



Ballistic Protection to Counter the Effects of the Improvised Explosive Devices (IED) Threat

The Individual Protection Directorate's (IPD) ongoing efforts in Ballistic Protection for the Individual Warfighter are developing technology to improve personnel armor. This is being accomplished by reducing the weight and/or increasing the level of protection. These developments can be applied to increase the level of protection offered to the individual to counter the effects of the Improvised Explosive Devices (IED) threat. Recently, IPD developed an extremity armor prototype (OTV-Extra, top picture), to increase the area of coverage offered by the Outer Tactical Vest (OTV), which is a part of the Interceptor Body Armor currently being fielded. The concept was submitted to the PM-Clothing and Individual Equipment for consideration and the upper arm module with slight modifications was adopted for limited fielding. The IPD concept built on the design that the 82nd Airborne Division did as an in-the-field fix. The upper arm and rear shoulder modules are designed to accommodate any soft ballistic materials at the appropriate areal density to perform similarly to those used in OTV. The side torso module was also designed with a dual-use capability. It is designed to accommodate a ballistic component plus a 1-liter bladder for hydration purposes. The ballistic component demonstrated in the current torso module prototype is at the OTV fragments/handgun levels but can be upgraded to a higher fragment protective capability or to 7.62 x 39 ball protection via rigid inserts.

Additional concepts are being explored by IPD to provide higher levels of protection through increased area of coverage while maintaining good mobility with the primary focus on lower extremities at this point. The modules under development are being designed to interface with Interceptor and address those areas from the neck down. The current IPD concepts are being developed to accommodate protection for various levels of performance to include:

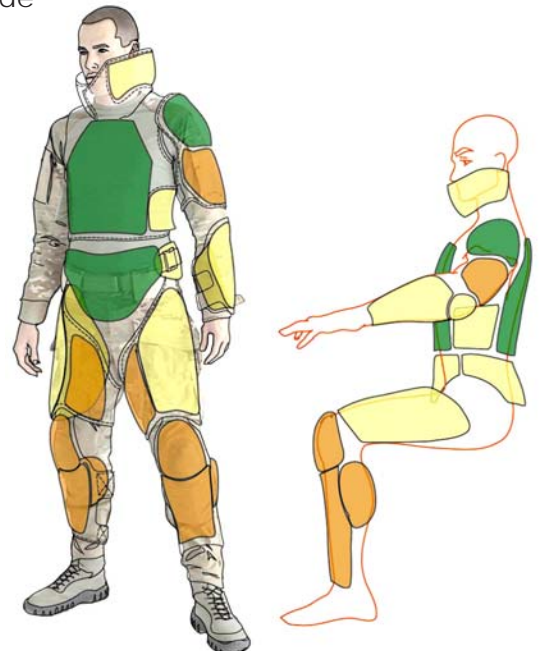
- **Soft System:** Frag/handgun equal to outer tactical vest
- **Rigid Composite:** Increased frag/handgun equal to helmet
- **Rigid Composite:** 7.62 x 39mm (AK47) ball only, increased frag/handgun

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Concept drawing demonstrating coverage and protection tailorability

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